Jm 1211-25

0.00

0.00

QC2- Inspect parts off machine FAI/FAIB

Memo

120

QC

120

Quality Control

NCR:	Yes	/	No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA:	Date:	**
QA Closed:	Date:	,
-	Water Jet ng. Coor.	Engineering Quality Other

										QA Closed:	Date			
Work Order	··				DISPOSITION	AGAINST DE	EPARTMENT/PROCESS							
Part No	-				Rework Scrap									
					Use-as-is	Thermoforming Finishing Rec/Store/Packaging Other								
NCR No	o				Work Order Update									
Root	T		l I	Descri	ption of work order update	Init	Initial Action			Sign &				
Cause	Date	Step	Qty	(or Non-conformance	Chief	Eng	· Descri	ption	Date	Verification	QC Inspector		
oc/Data														
quip/Tooling	7													
perator	7													
laterial														
tup														
ther														
ocess			1 1											
upplier														
raining														
napproved												4		
					F	AULT (CATE	GORY				•		
Landing	Gear				General									
	Bending				Bend	Gr	ain			Ovalized		Pressure/Forced		
	Centre N	ot Concer	ntric to O)/S	BOM/Route	На	rdwa	re		Over/Under	tolerance	Temperature/Cure		
	Cracks				Broken/Damaged	Ins	pecti	on Incomplete		Part Incorred	ct 🗍	Weld		
	Crushed/	Crimped.			Burrs	Ins	tructi	ions Incomplete/Ui	nclear	Part Lost/Mi	ssing	Wrong Stock Pulle		
	Cuffs				Contamination	Пм	ainte	nance		Part Moved	_	_		
	Heat Trea	at			Countersink	Мі	slabe	led		Positioned V	Vrong			
	Inspectio	n Strip in	Tube		Cut Too Short	М	sread			Power Loss/	Surge	Other		
	Ripples in	Bend			Drill Holes	Of	fset		<u> </u>	•	<u> </u>			
	Torque W	/aves in E	xtrusion		Drawing	Пог	it of C	Calibration		1 11 18				
	Turning S	equence			Finish	Пог	it of S	equence						
	Wave/Tw	ist in Tub	e ·		Folio	\vdash		Dimensions						

150

QC

150

Quality Control

Memo

											DQA:	Date:		
NCR:	Yes	/ No				WORK ORDER NON-	-CO	NFOR	MANCE / UP	DATE			•	
						·			· · · · · · · · · · · · · · · · · · ·		QA Closed:	Date:		
Work Ord	er:					DISPOSITION			AGAINST DEPARTMENT/PROCESS					
Part I						Rework Scrap Use-as-is Work Order Update		Thern	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite		Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other	
						 -								
Root Cause		Date	Step	Qty	Des	otion of work order update or Non-conformance		Initial nief Eng		tion ription	Sign & Date	Verification	QC Inspector	
oc/Data quip/Tooling Operator Material etup Other Process supplier Training								i.				·		
	L	· · · · · · · · · · · · · · · · · · ·		•		****	FAUI	LT CATE	GORY			<u> </u>		
Landi	ng (Gear			_	 General		_						
		Bending Centre No Cracks Crushed/C Cuffs Heat Trea Inspection Ripples in Torque W	Crimped. t n Strip in Bend	Tube		Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes Drawing		Instruct Mainte Mislabe Misreac Offset	on Incomplete ions Incomplete/l nance led	Unclear	Ovalized Over/Under Part Incorred Part Lost/Mi Part Moved Positioned V Power Loss/	ct ssing Vrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other	
		Turning Se			1	 Finish		1	equence					

Outside Dimensions

Wave/Twist in Tube

Quality Control

NCR:	Yes	1	Nο

WORK ORDER NON-CONFORMANCE / UPDATE

DQA:	Date:	*
· · · · · · · · · · · · · · · · · · ·		
		•

											QA Closed:	Date	2:
Work Orde	er:				DISPOSITION		AGAINST DEPARTMENT/PROCESS						
Part No. Scrap Machinir Use-as-is Thermoformin NCR No. Work Order Update Large Fa										l Fab	4	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root				Descri	ption of work order update	In	itial	Act	tion		Sign &		
Cause	Date	Step	Qty		or Non-conformance	Chie	ef Eng	Desc	ription	•	Date	Verification	QC Inspector
Doc/Data													
Equip/Tooling													
Operator [
Material													
Setup		•											
Other													
Process													,
Supplier									•				
Training													
Unapproved													
					F	AULT	CATE	GORY					
Landin	ng Gear				General						_	_	
	Bending				Bend		Grain				Ovalized		Pressure/Forced
	Centre No	ot Concer	ntric to	o/s	BOM/Route	[]+	Hardwa	re			Over/Under	tolerance	Temperature/Cure
	Cracks				Broken/Damaged		nspecti	on Incomplete			Part Incorre	ct	Weld
	Crushed/	Crimped.			Burrs		nstruct	ions Incomplete/I	Unclear		Part Lost/Mi	ssing	Wrong Stock Pulled
	Cuffs Contamination						Mainte	nance			Part Moved		
	Heat Treat Countersink						Mislabe	led			Positioned V	Vrong	
	Inspection	ection Strip in Tube Cut Too Short						1			Power Loss/	Surge	Other
	Ripples in	Bend			Drill Holes		Offset					· -	
	Torque W	aves in E	xtrusio	n [Drawing	Out of Calibration							
	Turning Sequence Finish					Out of Sequence							
	Wave/Tw	ist in Tub	e		Folio	Outside Dimensions							

.Work Orde November-15-12				*933		****			Page 4			
Revision ID: Item Name: Start Date:	647.1814 Gusset LH 11/19/12	Start Qty: 3.00	*3*	Accept	*N900		100) * s	Setup	Start Stop	171	S1* S2*
Required Date: Reference:	12/07/12	Req'd Qty: 3.00	*3*		Customer:			r)n	Start		4 .l.
Approvals:	Process Pla	an:	Date:	Tooling: _	D:	ate:		r			*N	R1*
••			Date:	SPC (Y/N):	Da	ate:				Stop	*N	R2*
Sequence ID/ Work Center II	D	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reje Qty		Reject Number	Insp. Stamp
100 SprayPaint Spray Painting		Memo PRIME IAV	V MIL-P-23377J TYPE1	0.00 CLASS N AS PER DWG.	(SEE NOTE 2)			3		Ø	_Ø_	A 13-4-5
		CARDINA	_ 4860-50 PRIMER BA	гсн: <u>124204</u>								
²⁰⁰ *200*		QC14- Inspect Spray Pa	int	0.00				3			(DAS 13.04
QC		Memo		0.00				~_				· +

210

Identify as per dwg & Stock Location: 137C 0.00

210
Packaging

Quality Control

Memo

0.00

Packaging

IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV

											DO	QA: _	Date	:
NCR:	Yes	/ No				WORK ORDER NON-O	CO	NFORM	MANCE / UP	DATE		_	_	*
						· ·				·	QA Clos	ed:	Date	:
Work Ord	ler:					DISPOSITION				AGAINST DI	EPARTME	NT/I	PROCESS	
Part NCR	No.					Rework Scrap Use-as-is Work Order Update		Skid-tube Crosstube Water Jet Machining Small Fab Prod. Eng. Coor. Thermoforming Finishing Rec/Store/Packaging Supplier					Engineering Quality Other	
Root					Descri	otion of work order update		Initial	Ac	tion	Sign 8	Ž		
Cause		Date	Step	Qty	C	or Non-conformance	Cł	nief Eng	Desc	ription	Date		Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved														
	- 12 2-24					F.	AUL	LT CATE	GORY					
Landi		iear Bending Centre No Cracks Crushed/0		ntric to (o/s	General Bend BOM/Route Broken/Damaged Burrs		4	re on Incomplete ons Incomplete/I	Unclear	Ovalized Over/Un Part Inco	ider te orrect		Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled
		Cuffs Heat Trea	t	Tub-		Contamination Countersink		Mainte Mislabe	nance led	Onclear	Part Mov	ved ed W	rong	_
	\vdash	Inspection Rinnles in	•	rube	<u> </u>	Cut Too Short Drill Holes	\vdash	Misread		L_	Power Lo	055/5	urge	Other

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Quality Control

93333

Page 5

November-15-12 11:42:27 AM *N900040100* Accept Setup Start Item ID: 647.1814 **Revision ID:** Stop Gusset LH Item Name: 11/19/12 Start Qty: 3.00 **Cust Item ID: Start Date:** Req'd Qty: 3.00 Required Date: 12/07/12 **Customer:** Reference: Run Start Date: _____ Tooling: Date: Approvals: Process Plan: Stop SPC (Y/N): Date: Date: QC: Reject Tool ID Tool # Plan Insp. Set Up/ Accept Reject Sequence ID/ Operation Code Qty Qty Number Work Center ID Description **Run Hours** Stamp 220 QC21- Final Inspection - Work Order Release 0.00 *220* 0.00 Memo

mt (3-4-9

											DQA:	Date	·
NCR:	Yes	/ No				WORK ORDER NON-	COI	NFORM	MANCE / UP	DATE			
											QA Closed:	Date	·
Work Ord	er.					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
Part NCR	No.			_		Rework Skid-tube Crosstube Machining Small Fab Thermoforming Finishing Work Order Update Large Fab Composite				•	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other	
Root		·			Descri	ption of work order update		Initial	Act	tion	Sign &		
Cause		Date	Step	Qty	C	or Non-conformance	Cr	nief Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved													
							AUL	T CATE	<u> </u>				
Landi	ing Gear General Bending Bend Centre Not Concentric to O/S BOM/Route Cracks Broken/Damaged Burrs Cuffs Contamination Heat Treat Countersink Inspection Strip in Tube							Instruct Mainte Mislabe Misread	on Incomplete ions Incomplete/U nance led		Ovalized Over/Under Part Incorred Part Lost/Mi Part Moved Positioned V	ssing Vrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
	1 1	Ripples in	Bend			Drill Holes		Offset					

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

Picklist Print

November-15-12 11:42:27 AM

Work Order ID:

93333

Parent Item:

647.1814

Parent Item Name:

Gusset LH

Start Date: 11/19/12

Required Date: 12/07/12

Start Qty: 3.00

Required Qty: 3.00

Comments:

IPP REV:A 12.10.03 NEW ISSUE DD VERF:JFS

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M2024T3S.040 2024-T3 .040 sheet		Purchased	No			110	sf	191.9512	0.085	12684711			Juna
2021 13 10 10 3.000				Location		Loc Oty	<u>Lo</u>	c Code					
				MAT022		191.9511626							
				120	605	32.9127416							
				121	197	32.498421							
				122	136	17.39							
				123:	217	109.15			123	3217			

											DQA	Date:	1
NCR:	Yes	/ No				WORK ORDER NON-O	NFORM			*			
											QA Closed	: Date:	•
Work Ord	er:					DISPOSITION				AGAINST DE	PARTMENT	PROCESS	
Part NCR	No.					Rework Scrap Use-as-is Work Order Update		! Therm	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	-	Water Jet od. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root	,		1		Descri	tion of work order update		nitial	Λct	tion	Sign &	Γ	<u> </u>
Cause		Date	Step	Qty		or Non-conformance		ief Eng		ription	Date	Verification	QC Inspector
Doc/Data			- Greb	~.,			 	iici ziig	<i>D</i> esc.	ipeion	Dute	Vermedion	QC MSpector
Equip/Tooling													
Operator													
Material													
Setup												1	
Other													
Process				:									
Supplier													
Training													
Unapproved													
						F	AUL	T CATE	GORY				•
Landi	ng (Gear				General							
		Bending				Bend		Grain			Ovalized		Pressure/Forced
		Centre Not Concentric to O/S BOM/Route						Hardwa	re		Over/Unde	tolerance	Temperature/Cure
	Cracks Broken/Damaged						Г	Inspecti	on Incomplete		Part Incorre	ct	Weld
Crushed/Crimped. Burrs						Instructi	ons Incomplete/l	Jnclear	Part Lost/M	issing	Wrong Stock Pulled		
Cuffs Contamination						Mainte	nance		Part Moved		-		
Heat Treat Countersink						Mislabe	led		Positioned '	N rong			
	Inspection Strip in Tube Cut Too Short Misread							Power Loss,	/Surge	Other			

Offset

Out of Calibration

Out of Sequence

Outside Dimensions

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

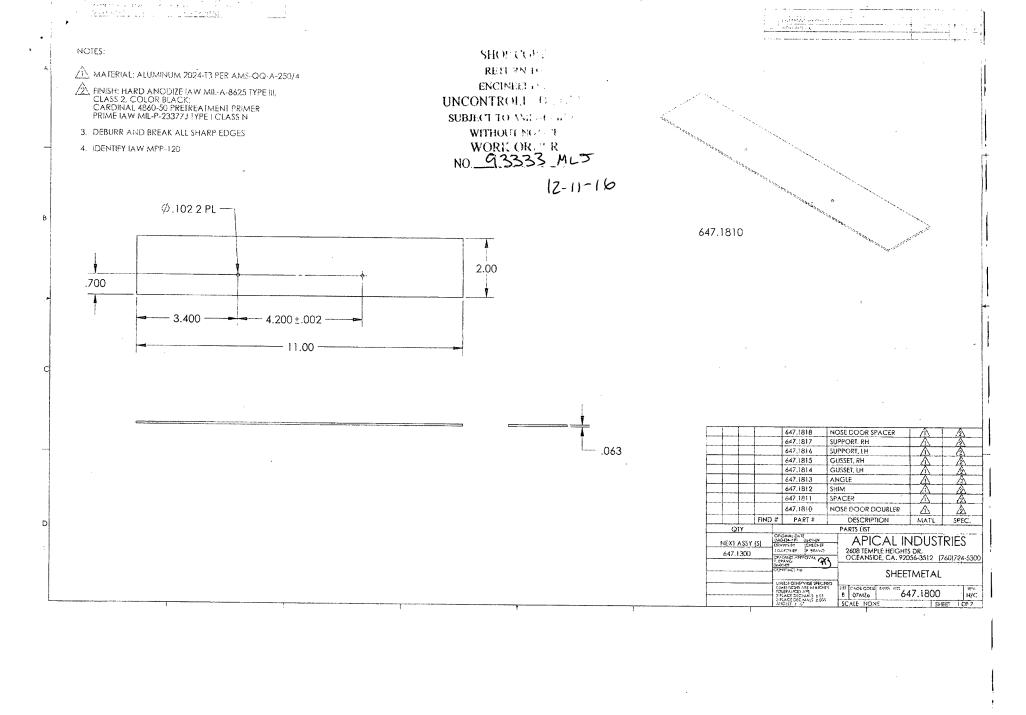
Torque Waves in Extrusion

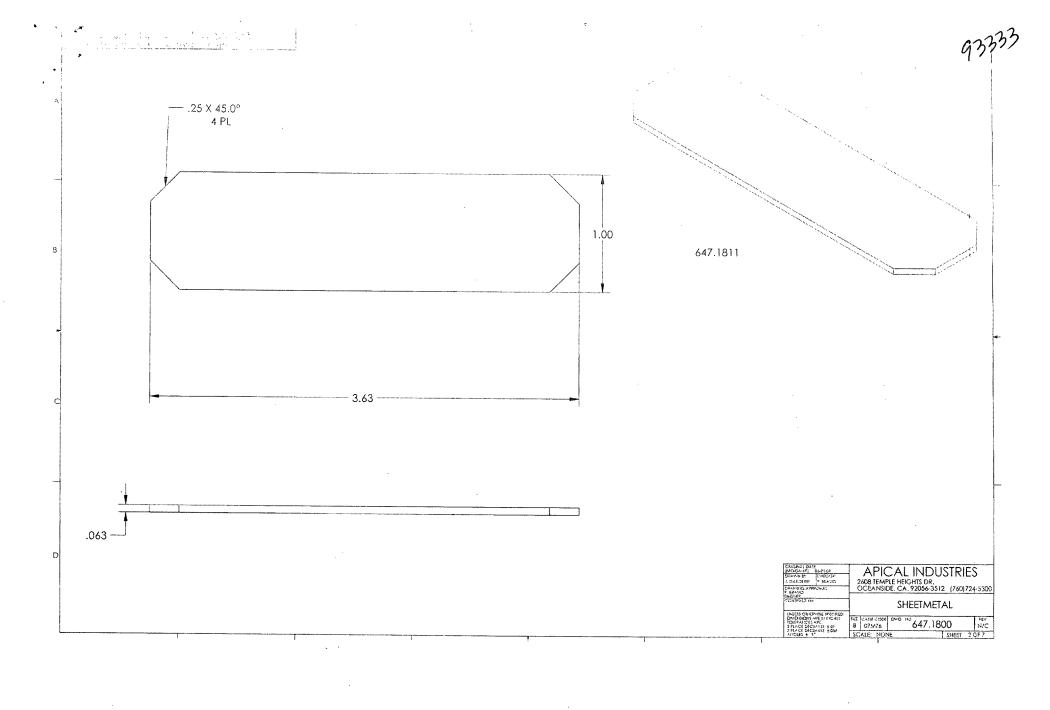
Drill Holes

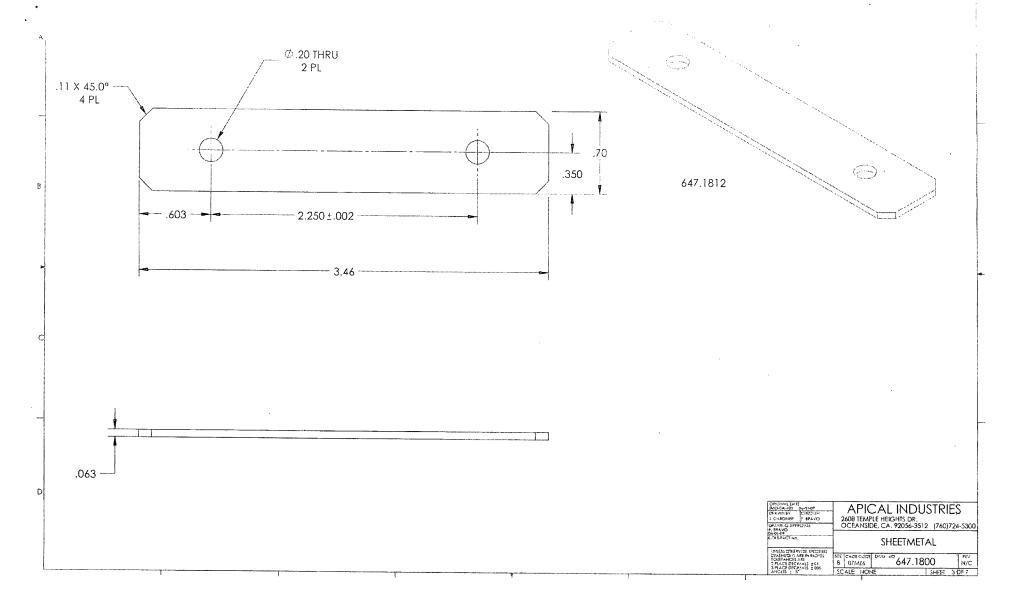
Drawing

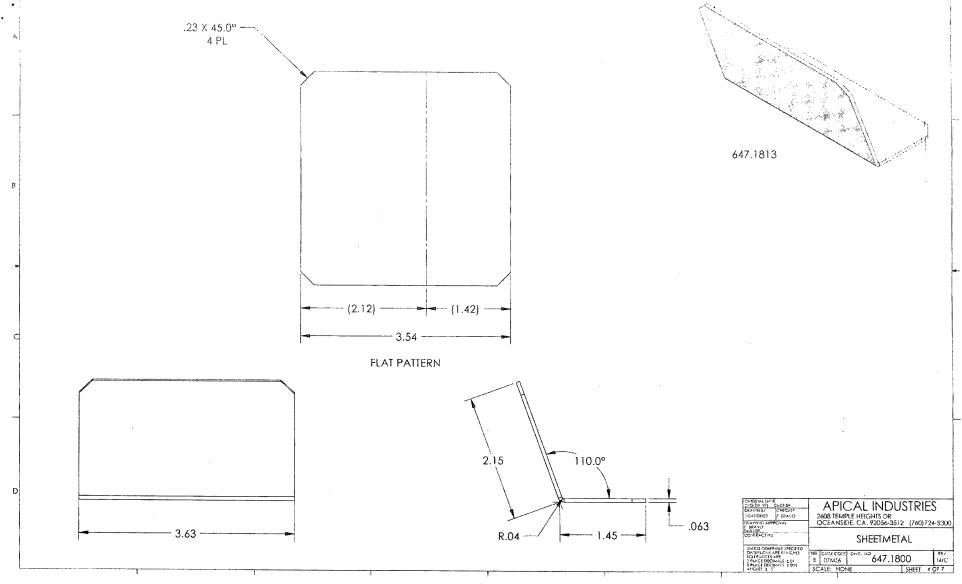
Finish

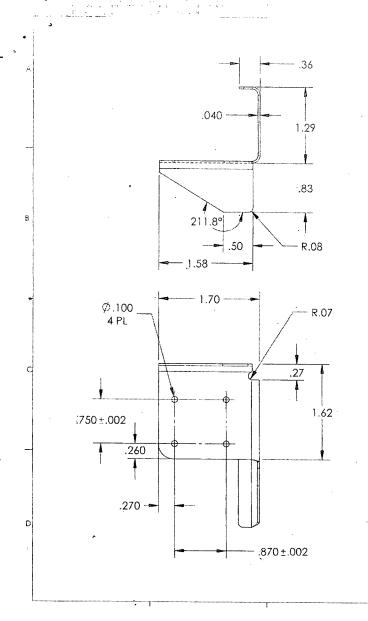
H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

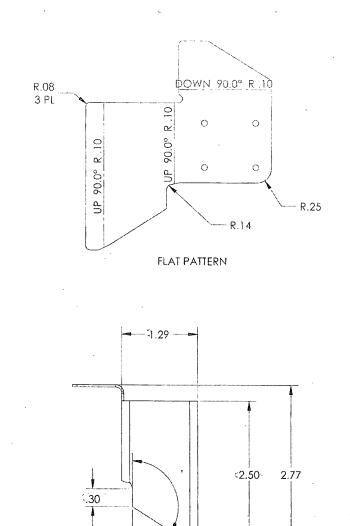






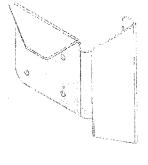






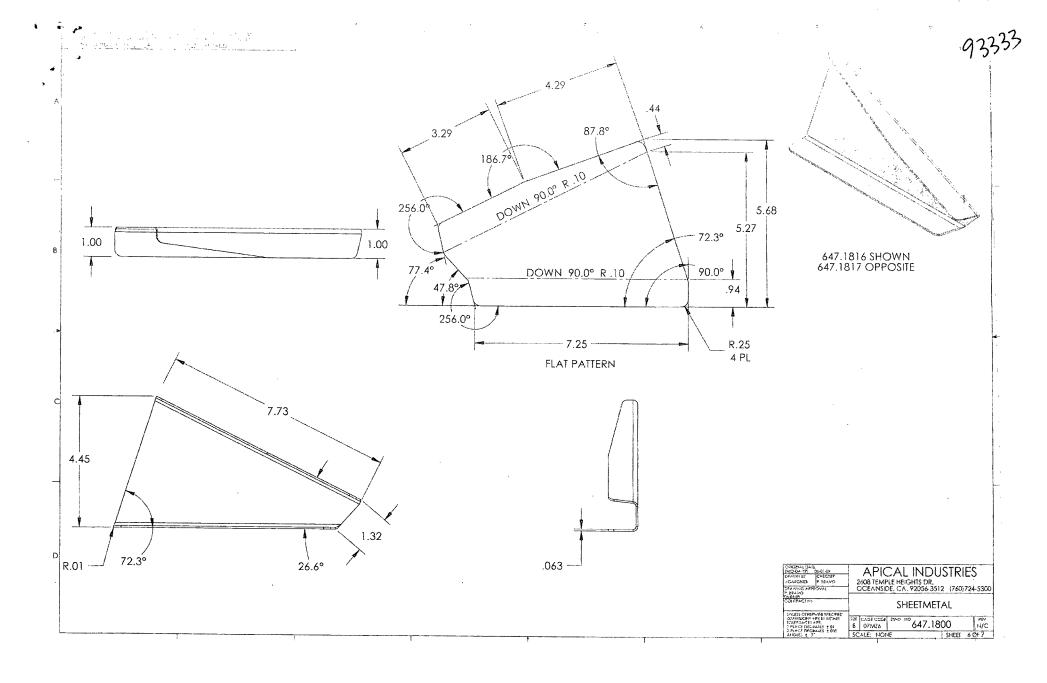
122.5°

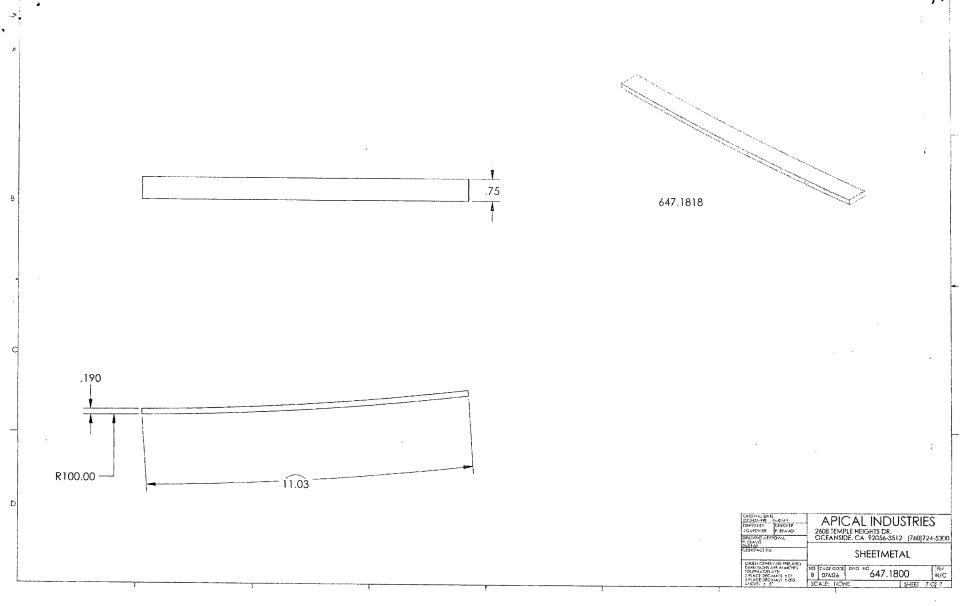
1.11



647.1814 SHOWN: 647.1815 OPPOSITE

CP/GNAE 0416 35(C-05-49) 06-03-04		APICAL INDUSTRIES				
DEVINIES TOAPDHER	CHLCEEP F BPAVO	2608 TEMPLE HEIGHTS DR.				
DPAWING AFFPÜVAL P. BPAYO 16-01-02		OCEANSIDE, CA	. 92056-3512 (760)	724-5300		
CONTRACTM	-	SH	EETMETAL			
(EXESS CHAPPARTE (PECATED CHAPPONS ARE IT NICHES (CHEVANCES ARE, 2 PLACE DECIMALS ± 01		SHE ICACE CODE DWG N	°647.1800	PEV.		





DART AEROSPACE LTD	Work Order:	93333
Description: (TUSSED LH	Part Number:	647.1814
Inspection Dwg: 643 1870 Rev: 10/c		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing	Tolerance	Actual A	Accept	Reject	Method of Inspection	Comments	
Dimension							
Ø 0.100"	40.004,	0.102"			V	Producer	
0.040"	++0000	0.037	_		V		
O 83"	14 0010°	0.83"	-	·	V		
0.50	11-0-000	0.500			V		
1.58	th 0.010"	1.58			V		
O.750"	4-0.003"	0-751"			V		
୦.ଅ୯୦"	th-0.005"	0,262				·	
0.270	11-0-0054	0.274"	_				
0.870	+1-0002"	0.873			V		
0,36"	11- 0:010°	0.30	_		V	# 1	
2.50"	11-0010	2.503			V	·	
1.29"	11-0.010"	1,295"			V		
	1.0910						
					•		
		 					
		190					
				<u> </u>			
	<u> </u>			 			
			+	+,	 		
				-			
			 			-	
* .				1			
· .	\$40.000 \$40.000 \$40.000						
			· .				
		The second second second					
	.4.549						
	1	•					

Measured by: Jm

Date: 12-11-25

Audited by: 25)
Date: 10) 04

Preliminary Approval:

Date:



A.T.G. Industries Inc. 731, rue Industrielle Rd. PLATING DEPARTMENT Rockland, On K4K 1T2 Canada

Ph: (613) 446-4544 Fax: (613) 446-4556

Pack List

Number: 62282

Date: 26-Mar-13

To

DART AEROSPACE LTD 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 Canada

Ship To

DART AEROSPACE LTD 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7

Canada

Fav. 612 622 1105

Ph: 613-632-5	200 Fax: 613-632-1185	Pn:	613-632-5200	Fax: 613-632-1160	
Terms		Ship Via			
Quantity	Description				
1	Part: ASST		Rev:		
lot					
	3.PGS 647.7918 3.PCS 647.1814				
	3 PCS 647.7917				
	4 PCS 41232-200-002-001 HARD ANODIZE BLACK				·
	MIL-A-8625 TYPE III CLASS 2				
	24 PCS D2348				
	20 PCS D2428				
	8 PCS D4726-1 20 PCS D2056				
	BLACK ANODIZE				
	MIL-A-8625 TYPE II CLASS 2				
-	8 PCS D3299-7				
	BLUE ANODIZE MIL-A-8625 TYPE II CLASS 2				
·	Job: 20130177	PO: 19404	Line:		
	Certificate of Cor	nformance	natural and the second of the		
	A.T.G. Industries certifies that all items with all requirements, specifications and	in this shipment are in cold d drawings referenced in t	ntormance he purchase order.		
	ISO 9001 : 2008 REG	·	•		
	ATG SALES-2010 TE				
b (1)	DATE: 26/3/13				
	M				
	CERTIFIED SIGNATURE :				
	RECEIVER SIGNATURE :				